CLAIMS

What is claimed is:

1. A method for detecting coronary artery disease in a mammal comprising the steps of:

measuring a baseline level of a marker related to BNP in said mammal;

inducing a cardiac stress in said mammal;

measuring the marker related to BNP level immediately post cardiac stress; and

calculating a relative change in the marker related to BNP level; wherein coronary artery disease is detected in said mammal if the relative change in marker related to BNP level after cardiac stress is greater than a predetermined clinically effective threshold value.

2. The method of claim 1, wherein the marker related to BNP is BNP, NT pro-BNP, or pre pro BNP.

3. The method of claim 1, wherein the marker related to BNP is BNP.

4. The method of claim 1, wherein the measuring of the BNP level comprises an immunoassay.

5. The method of claim 1, further comprising the step of measuring the marker related to BNP level about 10-15 minutes post cardiac stress.

6. The method of claim 1, wherein said mammal is a human.

7. The method of claim 6, wherein said human has no known history of a previous myocardial infarction.

8. The method of claim 6, wherein said human possesses at least one cardiac risk factor selected from the group consisting of age greater

than 35 years, history of smoking, diabetes mellitus, obesity, high blood pressure, high cholesterol, elevated low density lipoproteins and family history of cardiac disease.

9. The method of claim 1, wherein the cardiac stress comprises exercise stress testing.

10. The method of claim 9, wherein the exercise stress testing comprises a treadmill test.

11. The method of claim 9, wherein the exercise stress testing comprises a bicycle test.

12. The method of claim 1, further comprising the administration of a myocardial perfusion imaging test to a human during said cardiac stress.

13. The method of claim 1, further comprising the administration of a stress echocardiography test to a human during said cardiac stress.

14. The method of claim 1, further comprising the administration of a single-photon emission computed tomography test to a human during said cardiac stress.

15. The method of claim 1, wherein the cardiac stress comprises pharmacologic stress.

16. The method of claim 15, wherein the pharmacologic stress is induced by the administration of adenosine to the mammal.

17. The method of claim 15, wherein the pharmacologic stress is induced by the administration of dobutamine to the mammal.

18. The method of claim 1, wherein the relative change of the marker related to BNP is at least about 10%.

19. The method of claim 1, wherein the relative change of the marker related to BNP is from about 10% to about 400%.

20. The method of claim 1, wherein the relative change in the marker related to BNP is at least about 1% per minute of exercise.

21. The method of claim 20, wherein the relative change in the marker related to BNP is at least about 5% per minute of exercise.

22. The method of claim 20, wherein the relative change in the marker related to BNP is from about 5% to about 27% per minute of exercise.

23. A method for risk stratification in coronary artery disease in a mammal comprising the steps of:

measuring a baseline marker related to BNP level in said mammal;

inducing a cardiac stress in said mammal;

measuring the marker related to BNP level immediately post cardiac stress; and

calculating a relative change in the marker related to BNP level; wherein the relative change in the marker related to BNP level correlates with severity of the coronary artery disease, and wherein the higher the relative change, the greater the severity of coronary artery disease.

24. The method of claim 23, wherein the marker related to BNP is BNP, NT pro-BNP, or pre pro BNP.

25. The method of claim 23, wherein the marker related to BNP is BNP.

26. The method of claim 23, wherein the measuring of the BNP level comprises an immunoassay.

27. The method of claim 23, further comprising the step of measuring the marker related to BNP level about 10-15 minutes post cardiac stress.

28. The method of claim 23, wherein said mammal is a human.

29. The method of claim 28, wherein said human has no known history of a previous myocardial infarction.

30. The method of claim 28, wherein said human possesses at least one cardiac risk factor selected from the group consisting of age greater than 35 years, history of smoking, diabetes mellitus, obesity, high blood pressure, high cholesterol, elevated low density lipoproteins and family history of cardiac disease.

31. The method of claim 23, wherein the cardiac stress comprises exercise stress testing.

32. The method of claim 31, wherein the exercise stress testing comprises a treadmill test.

33. The method of claim 31, wherein the exercise stress testing comprises a bicycle test.

34. The method of claim 23, further comprising the administration of a myocardial perfusion imaging test to a human during said cardiac stress.

35. The method of claim 23, further comprising the administration of a stress echocardiography test to a human during said cardiac stress.

36. The method of claim 23, further comprising the administration of a single-photon emission computed tomography test to a human during said cardiac stress.

37. The method of claim 23, wherein the cardiac stress comprises pharmacologic stress.

38. The method of claim 37, wherein the pharmacologic stress is induced by the administration of adenosine to the mammal.

39. The method of claim 37, wherein the pharmacologic stress is induced by the administration of dobutamine to the mammal.

40. The method of claim 23, wherein the relative change of the marker related to BNP is at least about 10%.

41. The method of claim 23, wherein the relative change of the marker related to BNP is from about 10% to about 400%.

42. The method of claim 23, wherein the relative change in the marker related to BNP is at least about 1% per minute of exercise.

43. The method of claim 42, wherein the relative change in the marker related to BNP is at least about 5% per minute of exercise.

44. The method of claim 42, wherein the relative change in the marker related to BNP is from about 5% to about 27% per minute of exercise.